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INDIAN CURRENCY PROBLEMS OF THE LAST
DECADE.

THE currency problems discussed in British India to-day are in many respects similar to those which have been under consideration recently in the United States. Greater security for a large amount of overvalued silver and greater flexibility in the issues of paper have been the conspicuous desiderata in the currency systems of both countries. Moreover, the measures which have been suggested as remedies in the two cases have been planned along somewhat similar lines.

Although the gold sovereign was two years ago made the standard of value in British India, and gold is now the only metal which is unrestrictedly minted and the coins of which circulate at their metallic value, there is as yet but little gold in circulation ; and the much overvalued rupee is still the universal medium of payment and the familiar money of account. Apprehension, therefore, is frequently expressed as to the continued maintenance of the terms of exchange now prevailing between the gold

and silver coins. Possible conditions are imagined under which the value of the rupee might fall below its legal rating in terms of shillings and pence, and various additional safeguards have accordingly been suggested in order to strengthen this rating. In India, as in this country, then, one of the problems at present under consideration is how to render the value of the silver coins secure beyond peradventure; and such measures, for example, as those proposed by Representatives Overstreet, Hill, and Levy in the last session of the American Congress, which aimed to strengthen the silver currency by making it redeemable in gold, have had their counterparts in British India.

Another defect in the currency which is common to both countries, but which is of far greater seriousness in India, is its inflexibility and unresponsiveness to variations in commercial needs. The monetary requirements of India fluctuate very widely in volume from season to season and from year to year. The trade of the country is mainly in raw materials and agricultural produce, and business activity varies rapidly over different parts of the country from month to month in correspondence with the harvesting of the different crops. In Western countries such fluctuations in the demand for currency are largely met by an increase or decrease in the use of fiduciary contrivances, but in India there is as yet no general recourse to these arrangements. Banking facilities, as we understand them, are restricted to the great commercial centres; and among the natives payments are seldom effected by means of checks and transfers on bank books. The banks do not enjoy the privilege of issuing notes; the government issues of paper currency are strictly limited; and the silver coins, which are the only currency that circulate freely, cannot be increased in times of stringency by coinage on private account, nor will they be decreased when redundant by export to other countries. We shall see, too, that the situation is aggravated by the existence of an independent

treasury system like that of the United States, which frequently abstracts money from circulation at times when it is most in demand. The need is very urgent, therefore, for some arrangement which will automatically adjust the volume of the circulation to changes in the monetary requirements; and the various plans suggested in India to attain this end are similar to those with which we are familiar in America, such as the abolition of the separate treasury system, the substitution of bank-notes for government paper, and provision for a larger freedom of issue on the part of the banks.

We cannot, however, reach a clear understanding of present currency questions in India without glancing back over the succession of events which has resulted in the present situation.

At the beginning of the nineteenth century there was no uniform measure of value in British India. Silver seems to have been the usual standard over the greater part of the country, with gold coins in concurrent circulation, at rates varying from time to time, according to the price of gold bullion; but in certain parts of Southern India (*e.g.*, Madras) gold appears also to have served as standard. Whatever the currency, whether of gold or silver, the coins differed widely in denomination, weight, and fineness, even within the same regions. An Act of 1793, for instance, specifies no less than twenty-seven varieties of rupees as current in the several districts.* This confused condition of the currency, involving many losses and much inconvenience in trade, led the East India Company in 1806 to announce its intention of establishing one general system of currency throughout the whole of its possessions in Asia; but it was not until a generation later that the intention was carried out. In 1835 a particular rupee (weighing 180 grs., $\frac{1}{2}$ fine) was selected and

* Robert Chalmers, *A History of Currency in the British Colonies*, p. 337, note.

declared the standard coin for the whole of British India ; and this rupee, unaltered either in weight or fineness, has remained the common standard down to the present. The rupee at that time was rated as equal to two English shillings (24*d.*) ; but, after a career of irregular ups and downs, we find it to-day apparently fixed at one and one-third shillings (16*d.*). In other words, the pound sterling, which was formerly the equivalent of ten rupees, is now exchangeable for fifteen.

The Act of 1835 declared that no gold coin was thereafter to be a legal tender of payment anywhere in India, but at the same time it authorized the minting of a gold piece, known as the "mohur," to be of identical weight and fineness with the silver rupee, and designed to circulate at its metal value. These mohurs circulated then as equal to fifteen rupees, and from 1841 to 1852 were so received at the public treasuries. With the fall in the value of gold, however, which threatened to be serious in the early fifties, the government refused any longer to accept them.

During the fifties and sixties there were frequent movements in the market rate of exchange between gold and silver, which were not without effect upon the trade relations of India with England and other gold-using countries. Various of the Indian Chambers of Commerce accordingly memorialized the government for a gold currency, and the establishment of fixed rates of exchange between the English and Indian coins ; and even the government of India itself proposed in 1864 that the sovereign should be made a legal tender * at the value of ten rupees, and that the government paper should be made

* It would appear that efforts to make gold a legal tender for a specific amount, so as to establish fixed rates of exchange between the gold and silver coins, had been first made by the East India Company, in Bengal, in 1766 ; but these early efforts had conspicuously failed, it having been found necessary to rerate the coins twice within the next five years. Sir James Stewart, *Principles of Money applied to the Coin of Bengal*, 2d edition, 1792, pp. 25-37.

redeemable in either sovereigns or rupees at this rate. At about the same time various English economists (*e.g.*, McCulloch) * were also advocating the introduction of a gold currency in India, on the ground that it would provide a new market for the increasing supplies of that metal, and so would “counteract that fall in its value which has been so generally apprehended.” The imperial government, however, hesitated. Though agreeing that gold might once more be made receivable for public dues, and admitting that further steps towards the adoption of a gold currency were contemplated, the home office believed that the time had not quite yet arrived when it would be advisable to make British gold a legal tender in India.

The opportunity of introducing a gold currency upon these terms was soon lost; for in the next few years the fall in the price of silver began, and the rupee sank rapidly in relation to gold from the level (24*d.*) about which it had oscillated ever since its institution as standard. Occasionally there were temporary revivals, notably at the time of the Sherman Act; but by 1893 exchange had fallen to a little below 15*d.*, and the rupee, in other words, had lost three-eighths of its value in terms of British gold. † The ill effects of this fall in silver upon the finances of the Indian government, one-fourth of whose revenue is used under normal conditions to meet obligations in England; upon the foreign commerce of India, four-fifths of whose sea-borne trade is with gold-standard countries; upon the investment in India of European capital, so essential to that country’s developement; upon the incomes of Europeans and European capital employed there,—all these are matters of familiar history.

Until 1892 the Indian government endeavored to remedy the situation by working for the adoption of some

* *Encyclopædia Britannica*, 8th edition, vol. xviii., article on Precious Metals, p. 473.

† See Appendix, Table I.

sort of an international agreement which would re-elevate the gold price of silver, or, at any rate, would make it more stable. Representatives were sent to the International Conference at Paris in 1881, and to the Brussels Conference in 1892, with this end in view. But, long before the assembling of the delegates on the latter occasion, it had come to be believed by many that nothing in the way of effective relief was to be expected from an international agreement, and the old proposal to change the standard from silver to gold had been revived. Indeed, several months before the opening of the conference the government of India itself had petitioned the home government for permission to close the mints to silver, and to make various arrangements for the introduction of a gold standard, in case the conference failed to arrive at a satisfactory conclusion. These proposals had been referred to a committee of seven distinguished men, under Lord Herschell's presidency; and in the spring of 1893, after the unsuccessful termination of the International Conference, the committee brought in a report which, in the main, was in their favor.

In accordance with the recommendations of the committee, on June 26, 1893, the act was passed definitively closing the Indian mints to the coinage of silver on private account. The government, by the terms of the act, retained, however, the power to coin rupees at its discretion, and, indeed, announced on the same day that it would hold itself ready to give them in exchange for gold, whenever they were required by the public, at the rate of 16*d.* per rupee. This left the mints still open, in a sense, and gave opportunity for the subsequent expansion of the currency. It left the rupee coinage more or less dependent upon the needs of the people, and allayed all fears as to any considerable rise in the rupee exchange. The notification, it will be seen, did not explicitly fix any ratio between the rupees and the English coins, but only

set a maximal limit to its possible rise. The rupees might still — and, as we know, they did — fall considerably below the rating of 16*d.*, but they could not rise above that value so long as the government adhered to the policy announced, of giving rupees for gold on those terms.

The selection of this maximal ratio, though avowedly tentative, was not arbitrary. It was approximately the average of the ratios of the five years preceding and only a little above that prevailing at the time. It involved, therefore, only a very small departure from the *status quo*, and the slightest possible shock to trade and the exchanges. Moreover, it resulted in very convenient terms of exchange between the Indian and the British coins. The sovereign became equivalent to just fifteen rupees, which was precisely the same rate at which the gold mohur used to exchange for rupees; and, singularly enough, the subsidiary coins of the two countries fitted in with each other very neatly. The rupee is subdivided into sixteen annas, and so one anna became equal to one penny and two hundred and forty annas to one pound.

At the same time the government took steps to encourage the actual introduction of a gold currency at this ratio. They were unwilling as yet to make gold a legal tender between individuals; but, for themselves, they offered to accept sovereigns on these terms in payment for all government dues; and they also offered to issue currency notes in exchange for British gold at the same rate.

The Herschell Committee had been judiciously non-committal as to the probable consequences of the closing of the mints. "Exchange might rise suddenly and considerably," they said, or it might "not for a considerable time rise at all," or, indeed, it was possible that "even the existing ratio might not be maintained."* The closing of the Indian mints, as is well known, was accompanied

* *Report of the Indian Currency Committee* (1892), § 149.

in the United States by the reassembling of Congress to repeal the silver-purchase act, and was rapidly followed in Russia by a ukase similarly unfavorable to silver. The price of silver fell swiftly,—fell more than 10*d.* per ounce within the next ten months, fell from an average of about 38*d.* per ounce in May, 1893, to 27*d.* in March, 1894. The rupee, however, rose momentarily in June to its legal rating in terms of gold (16*d.*), and, although it sank considerably below that level in succeeding months, it has maintained a nominal value greatly in excess of its metal value ever since. The rupee touched its lowest point in January, 1895, when it was only accepted as the equivalent of 12½*d.* But even this was more than 2*d.* above its intrinsic value, and after that date the divergence became much greater. While the price of silver, on the average, has scarcely more than held its own subsequently, the price of the rupee has slowly risen again, until in 1898 it once more reached 16*d.* It can rise no higher, because the government offers to give rupees to any amount in exchange for gold at that rate; and for the past three years the rupee exchange has oscillated about this level, although the metal in the rupee has averaged in value but little more than 10*d.**

The question of the causes of this rise in the rupee exchange is not one of simple and demonstrable solution, and will probably never be answered to the satisfaction of all. Many have attributed it to a supposed contraction of the currency. There is little reason to believe, it is said, that the hoarding habits of the people changed on account of the closing of the mints; and rupees probably went on disappearing from circulation in this way after that event very much as they had before. Then, too, several important native states adopted the rupee currency after 1893, and they very likely also absorbed a certain amount of the British Indian coins. If, in addi-

* See Table I. and appended diagram.

tion to this abstraction of rupees in hoards and in the circulation of neighboring states, we take account of the rupees withdrawn by the government during the period (some twenty-five millions in all), and of the rupees which have been lost or melted down, these writers say that we need look no farther: we have here a quite sufficient explanation of the rise in the rupee exchange.

But, on the other hand, along with these influences for contraction there certainly were some counteracting factors. The melting of the rupees and their manufacture into ornaments, which used to withdraw so large a proportion of the coins from circulation, probably ceased with the closure of the mints and the rise of the rupee above its metallic value. The famines of those years, too, unquestionably caused many rupees to emerge from the hoards; for rupees would be brought out under these circumstances rather than ornaments similarly on account of their higher value. Moreover, between 1893 and 1898, the period during which the rupee was rising, two additions of about twenty millions each were made to the circulation by the direct action of the government. First, at the time of the closing of the mints the government took over a considerable stock of silver then held or being imported by the banks, which, when coined, amounted to nearly twenty million rupees; and this was rapidly passed into circulation. Then, again, in 1896, when the maximum limit of uncovered paper currency was raised from eighty to one hundred millions, another twenty million rupees was launched into currency. We may pass over for the present the far greater additions which have been made during the past two years,—the notes issued against gold deposited in London, the silver released from the Indian note reserve by the substitution of gold, and the recently renewed coinage of silver. Confining our attention strictly to the period when the rupee exchange was rising, enough has already been said to show how difficult it is to determine

even whether the money in circulation was increasing or decreasing during the period. Certainly, there is no convincing evidence either of any considerable diminution or of any considerable enlargement in its amount.*

The really vital question, however, is whether the rise in the rupee was due to a *relative* contraction of the currency. The absolute quantity of money in itself is a matter of no very great importance. What we want to know is whether, taking account of the growth of population, the increase of trade, and all other changes in economic conditions, there was any reduction of the currency during the period, as compared with the requirements for it. Under normal conditions this would not be a difficult matter to determine. If such had been the case, if the rise in the value of the rupee in terms of gold had been due to such a relative contraction, then, as a matter of theory, we should expect to find the fact confirmed by a similar rise in its value in terms of commodities. That is to say, we should expect to find a general fall in prices. Unfortunately, however, we can draw no conclu-

*Mr. F. C. Harrison, accountant-general of Madras, who has made a special study during many years of the statistics of the mintage of the coins in circulation, said that the currency probably had declined somewhat in volume during the period, that it had contracted from about 1,280 millions in 1893 to about 1,200 millions in 1898. See the *Minutes of Evidence* taken by the Indian Currency Committee, Part I., pp. 85-90, and the *Index and Appendices*, p. 82. For an explanation of Mr. Harrison's method of calculation, see his articles in the *Economic Journal* for December, 1891, June, 1892, March, 1893, and Professor F. Y. Edgeworth's criticisms thereon in the same *Journal* for March, 1812, and March, 1900. See, also, Mr. Harrison's note published in the Supplement to the *Gazette of India* for September 1, 1900.

Mr. W. S. Adie, assistant accountant-general of Burma, after a study of the same statistics, arrived at the conclusion that the rupee circulation had stood as high as 1,300 millions in 1893 and had dwindled to 1,180 or 1,200 millions by 1899. See the *Report of the Indian Paper Currency Department*, § 38, and the appended note, both of which are published in the Supplement to the *Gazette of India* for September 1, 1900.

On the other hand, Mr. J. E. O'Connor, the director-general of statistics to the government of India, and author of the annual official reviews of Indian trade during a period of more than twenty-five years, said: "I have no belief whatever in the general idea that there has been a great contraction of the currency. . . . We have no evidence whatever to support the theory." Indian Currency Committee, *Minutes of Evidence*, Questions 993, 994.

sion one way or the other from the actual price statistics of recent years. Almost the only articles of native production whose prices have been carefully collated are the food grains; and, in general, their movements over brief periods of time can indicate little more than the success or failure of successive harvests. The series of intense famines during 1896, 1897, and 1899, render the price movements of recent years peculiarly abnormal, and make them an extremely unreliable foundation for conclusions as to the expansion or contraction of the currency.* We can get little light, therefore, on our problem from the study of prices.

That there are many causes other than a contraction of rupees which might have resulted in a rising rate of exchange between rupees and gold no one will deny. This rate of exchange depends primarily upon the demand for gold for foreign shipment, and upon the difficulty which is experienced in obtaining it. Every influence, therefore, serving either to diminish the amount of gold shipments or to enlarge the amount of gold available in the country would tend to raise the gold rating of the rupee. Anything, for example, which rendered more favorable the balance of payments with gold-using countries would either lessen the demand for gold or increase its supply, and so lower its value in exchange for rupees. The large borrowings in London on Indian account † during

* See, for example, the testimony of Mr. O'Connor before the Indian Currency Committee (1818), *Minutes of Evidence*, Questions 1357-1361, 12143-12144. Consult also the tables and diagrams in the Appendices, pp. 163-171, and compare the answers to Questions 2789-2795.

† The following table shows the increase during the period in the Indian sterling debt to England. Amounts raised in England by private railway and other companies, not guaranteed by the state, are not included.

March 31, 1893	£106,623,767
March 31, 1894	114,113,792
March 31, 1895	116,005,826
March 31, 1896	115,903,732
March 31, 1897	114,283,233
March 31, 1898	123,274,680

(Indian Currency Committee Tables, No. 10.)

these years, the reduction in the Indian import of silver,* the contraction in the remittances of the Indian government below their normal amount,† — each of these factors has very justly been pointed to as a tendency favoring a rise in the rupee exchange. The constantly increasing output of gold from the Indian mines‡ contributed another tendency in the same direction, which appears to have been regarded by some even as the principal cause of the improvement in exchange.§ We must admit that each of these influences helped the rise of the rupee; and yet we may cling, with some justification, I believe, to the notion that, after all, a contraction in the currency was a very important factor,—not an absolute contraction, for there is no evidence that any such occurred, but a contraction relative to the growing needs of the country. Proof of this belief may be lacking, but there are certain presumptive indications.

* The average amounts of silver annually imported into India were as follows:—

	<i>Weight in ounces.</i>	<i>Value, Rs.</i>
1888-89 to 1892-93.	40,096,167	11,249,088
1893-94 to 1897-98.	35,720,155	8,192,155

(Computed from Indian Currency Committee Tables, No. 5.)

† The average annual remittances from India, as shown by the drawings of the secretary of state, were as follows:—

1888-99 to 1892-93	£15,816,344
1893-94 to 1897-98	13,874,603

(Computed from Indian Currency Committee Tables, No. 9, Statement A.)

‡ INDIAN GOLD PRODUCTION. (PRINCIPAL MINES.)

	<i>Ounces.</i>
1893	207,029
1894	209,919
1895	250,114
1896	321,878
1897	389,779
1898	417,124

(*Commercial and Financial Chronicle*, February 11, 1899.)

§ “Gold is being abundantly mined, and its value in terms of silver and commodities (including a monopoly rupee) falling. I regard the cheapening of gold as the real cause of the improvement in exchange.” Unsigned article in the *Economic Journal* for December, 1900, p. 456.

The movement of the rate of discount in the Indian banks during these years has frequently been given an undue significance in this connection. The general tendency of the rate was upward between 1895 and 1898, the years in which the rupee exchange was rising; and the rate rose as high as 12 per cent. in the Presidency Bank of Bengal early in 1898, just when the rupee exchange was approaching its maximum. This indicates very little for our purpose, however; for a high rate of interest only means a shortage of loanable capital, and may result from many other causes than a contraction of the currency.* As a matter of fact, the Bank of Bengal had charged as much as 12 per cent. several times in the years preceding the closure of the mints, when there was no such question of contraction.† But, on the other hand, while it must be admitted that a high interest charge is in no case evidence of contraction, it is altogether possible that such a stringency in the loan market, though perhaps due primarily to other causes, should be intensified and accentuated by a growing scarcity of the currency; and it is not improbable that the extraordinarily high average of the interest rates in 1897 and 1898 was partially due to this cause.

A more convincing indication that a comparative con-

* For an explanation of the stringency in the Indian money market during the year 1897-98, see the *Report of the Indian Currency Committee*, §§ 20-23; also, Mr. J. F. O'Connor's *Review of the Trade of India in 1898-99*, pp. 3, 4, and the testimony of Sir James L. Mackay before the Indian Currency Committee, Questions 286, 287, 687, 704-712, 754, 777, etc.

† The following are the maximal and average rates of discount demanded by the Bank of Bengal during the years under consideration. It will be seen that both in 1889 and in 1890 a rate as high as 12 per cent. was asked.

	<i>Maximum.</i>	<i>Average.</i>		<i>Maximum.</i>	<i>Average.</i>
1889 . . .	12 per cent.	7.0 per cent.	1894 . . .	10 per cent.	5.3 per cent.
1890 . . .	11 " "	5.8 " "	1895 . . .	7 " "	4.3 " "
1891 . . .	4 " "	3.1 " "	1896 . . .	10 " "	5.7 " "
1892 . . .	5 " "	3.5 " "	1897 . . .	10 " "	7.9 " "
1893 . . .	7 " "	4.9 " "	1898 . . .	12 " "	8.0 " "

(Indian Currency Commission, Appendices 13-15.)

traction did take place after 1893 is presented by the coinage statistics of the period. We know that during the twenty-five years preceding the closure of the mints the annual coinage of rupees from bar silver had averaged more than sixty-six millions, and that during the last decade of unrestricted coinage the annual average was above eighty-four millions. Even if we make a very large allowance for the reappearance of hoarded rupees after 1893, this certainly indicates a distinct reduction in the annual additions to the currency during the years when the rupee was rising. There is no evidence of any corresponding diminution in the growth of monetary needs during the same years. Indeed, there are indications that the demand for rupees was actually enlarging at a more rapid rate than usual. In addition to the increasing requirements of population and of trade, there was an extraordinary drain of rupees "to the interior of the country for the purposes of famine relief, for the purposes of military operations on the frontier, and for the purpose of railway construction." * It would appear, then, that the currency was not increasing as rapidly as formerly, although the demand for it was increasing more rapidly; and, if this be true, it would seem to imply, although the conclusion is not unavoidable, that a relative reduction in the currency had been taking place.

Such a reduction, we can see, would have tended to raise the value of the rupee in terms of gold as well as in exchange for ordinary commodities. But, as it would be obviously impossible to estimate the extent of this currency contraction, so it would be equally impossible to measure the degree of its influence upon the rupee exchange. We cannot even ascertain the relative importance of contraction as compared with the other factors which have been

* Mr. O'Connor attributes the rise in exchange primarily to this diversion of rupees from the commercial centres to the interior of the country. Indian Currency Committee, *Minutes of Evidence*, Question 989. See also Mr. O'Connor's *Review of the Trade of India in 1898-99*, pp. 3, 4.

mentioned. We simply know that these various causes were operating, but there is no possible way of dividing the total rise in the rupee exchange among them.

The story of more recent currency legislation in India can be told in a few words. The Indian government after 1893 did not vacillate with regard to the policy then adopted. When asked in the autumn of 1897, at the behest of the Wolcott commission, if they were willing to reopen their mints to the free coinage of silver in case of a similar agreement on the part of certain other countries, they expressed their "unanimous and decided opinion" that such a procedure would be "most unwise"; and early in the following year, when the rupee was approaching very near to the maximum value of 16*d.*, they petitioned the home government for further legislation which would render definitive the policy initiated in 1893, and would complete the establishment of gold as standard. The whole question of Indian currency reform was then once more submitted by the home government to a committee of distinguished English officials and financiers, this time under the leadership of Sir Henry H. Fowler. They collected a wide range of testimony, examined as many as forty-nine witnesses, and only reported their conclusions in July, 1899,* after more than a year's deliberation. The committee concurred in the opinion of the Indian government that the mints should remain closed to the unrestricted coinage of silver, and that a gold standard should be adopted without delay;† and to

* The report, with Minutes of Evidence, Appendices, etc., including in all more than eight hundred pages, is to be found in the following British documents: C. 9037; C. 9222; C. 9376; C. 9390.

† Several witnesses of high authority, however, who testified before the committee, were seriously opposed to the policy that was finally adopted. Sir John Lubbock, Sir Robert Giffen, Sir Forbes Adam, Lord Aldenham, Mr. Robert Barclay, and others urged that India should abandon all idea of a gold standard; and a number of them — notably, Sir Robert Giffen — desired that the Indian mints should be reopened at once to the free coinage of silver.

this end they recommended (1) that the British sovereign be given full legal tender power in India, and (2) that the Indian mints be thrown open to its unrestricted coinage. These recommendations were acceptable to both governments, and were shortly afterwards translated into laws. The act making gold a legal tender was promulgated on September 15, 1899; and preparations were soon thereafter undertaken for the coinage of gold sovereigns in the mint at Bombay.*

Both gold and silver are, therefore, now a legal tender in India; but gold is really the standard, for it alone is freely coined, and it alone circulates at its metallic value. The silver rupees still form the usual currency, and they have full liberative power; but, as we have seen, they circulate at much more than their actual value, being accepted as equivalent for gold at the ratio in units of weight of about 22 to 1, while the market ratio of silver to gold is as 32 to 1. Silver, therefore, has ceased to serve as standard; and the Indian currency system of to-day may be described as that of a "limping" gold standard similar to the systems of France, Germany, Holland, and the United States.

Before turning to consider the unsolved monetary problems which India has still to face, some account must also be given of the Indian paper currency. The present system of currency notes was instituted in 1861, when the privilege of issue was withdrawn from the chartered banks of India, and conferred upon a specially organized Government Department of Public Issue, which was modelled on the general lines of the Issue Department of the Bank of England. This government department is only allowed to issue notes in exchange for coin or bullion; and it is obliged to retain the coin and bullion as a covering for all notes, except that a certain fixed amount,

* It appears, however, that no gold coins have yet (April, 1901) been struck at the Indian mints, the coinage of sovereigns for India still taking place in the London and Australian mints.

as in England, can be invested in government securities. The maximal limit for the uncovered issue, which is supposed to represent the amount of notes that will always be outstanding, was placed in 1861 at four crores, or forty million rupees; but it has been raised from time to time, until now a fiduciary issue of 100 millions is allowed.* According to the provisions of the Act of 1861, notes could be issued against gold as well as against silver; but never until within the past two years has gold figured to any considerable extent in the currency reserves. Between 1865 and 1876 a very small amount of paper—an average of perhaps one-eighth of 1 per cent. of the total note issue—was based upon gold; but thereafter, while the ratio between the metals was rising, gold ceased to be used at all as a basis for the notes, and during twenty-two years no gold whatever was recorded in the reserves. The notification of June 26, 1893, as we have seen, provided for the issue of currency notes in exchange for British gold at the rate of fifteen rupees for a sovereign (*i.e.*, a rupee for 16*d.*); and early in 1898, when the market value of the rupee had risen to that level, gold began once more to be presented to the treasury in exchange for notes. It will be remembered that the government had also pledged itself in 1893 to give rupees for gold to any amount at the same rate. This was certain to accelerate the substitution of gold for silver in the government reserve, as soon as the rupee rose to the pre-

*The notes are issued at present by government commissioners in eight different districts, four "circles" and four "sub-circles," and are a legal tender only within the circle where they were issued. They are, however, current to some extent in the other circles as well; for they are everywhere received, at the offices of the post and of the railways, and can be tendered at any government bureau. In denomination they range all the way from 5 rupees to 10,000, the larger notes being commonly used for bank reserves.

The maximum of the fiduciary issue has been increased as follows:—

1861	40 millions
1870	60 "
1890	80 "
1896	100 "

scribed rate. But, further, in January, 1898, the government took another step in the same direction. "In order to afford a means of relief to the severe stringency" then prevailing, an act was passed providing for the issue of notes in India upon the basis of gold deposited in London, without requiring its actual transmission to India. In pursuance of this act the home government announced that, until further notice, it would sell telegraphic transfers on India at a rate not exceeding 1s. 4 $\frac{5}{2}$ d. for the rupee. In a word, the Indian government had offered in 1893 to give rupee notes or silver rupees to any amount in exchange for gold at the rate of fifteen rupees for a sovereign; and now, in 1898, it offered even to issue the notes against gold deposited in London.

The actual consequences of these provisions appear scarcely to have been foreseen by any one. It was everywhere regarded as desirable, in order to keep the rupee exchange at a steady level of 16d., that the government accumulate some sort of a gold reserve, which could be drawn upon whenever exchange tended to fall below that level. To this end the Indian officials in their despatch of March 3, 1898, had even proposed to secure gold by borrowing from abroad,—a proposition which was firmly negatived by the home government. With the improvement in exchange, it now seemed probable that the government would automatically obtain possession of a moderate amount of gold in return for its notes and silver. Few, however, had apprehended a deluge of the yellow metal. Gold made its first appearance in the currency reserve modestly enough early in 1898. Throughout that year there was no noteworthy increase in its volume; and at the close, on December 31, 1898, the gold in the reserve amounted only to about 3 $\frac{1}{2}$ millions, while the silver reached a total above 148 millions. It was with the turning of the year that an unprecedented and unexpected movement began.* The rupee exchange

* See Appendix, Table II.

rose for a time somewhat above 16*d.*, and gold immediately commenced to displace the silver in the reserve on a very large scale. By the end of 1899 the proportions of gold and silver held in the reserve had become almost equal; and a few months later the stock of gold amounted to almost four times as much as the holdings of silver. On the last day of April, 1900, nearly 142 million rupees were held in gold and only 37 millions in silver. Throughout the year 1899 the demand for drafts on India had continued very strong in England. It exceeded the total amount of council bills which the government had to offer to cover the home charges. In the end, early in November, 1899, it even exceeded the available cash in the Indian treasury; and the government found it necessary to set aside a portion of the gold received in London for drafts on India as a reserve against the currency paid out in India to meet these drafts. In other words, the government finally began to issue notes upon the basis of gold held in London, as had been permitted since January, 1898. During the last week of October, 1899, about £100,000 in gold—the equivalent of 1½ million rupees—was set aside, or “ear-marked,” in the Bank of England to cover currency issued in India; and this amount had increased by February, 1900, to £1,500,000,—a sum sufficient to meet an issue of 22½ million rupees.*

The transformation in the content of the note reserve which had taken place within the lapse of a single year was really startling. In the beginning of January, 1899, the gold held as reserve against the note circulation amounted only to about one-thirtieth of the silver; but in April, 1900, as we have seen, counting the gold “ear-marked” in London, it aggregated a total nearly four times that of silver.

* Notes were issued in India against gold in London only during the period of ten months, from November, 1899, to September, 1900. The amount of gold so “ear-marked” in the Bank of England remained £1,500,000 until May, 1900, then gradually decreased, until the last instalment was withdrawn late in August.

Gold, in fact, had displaced silver to such an extent as actually to prove an embarrassment; and, in the words of the finance minister, the government had been "nearly swamped" by it. The total issue of notes now amounted to almost 280 millions, while the stock of silver had dwindled to 37 millions. It was a serious question whether the treasury could much longer meet the demand for rupees in exchange for gold and notes. The government had already felt itself obliged to take steps to check further additions to its holdings of gold and to increase its holdings of silver. On January 10, 1900, the home office had withdrawn its offer to sell telegraphic transfers on India at a rate not exceeding 1s. $4\frac{5}{8}d.$, and raised its selling terms for a time to a rate as high as 1s. $4\frac{3}{8}d.$, which was practically prohibitive except for remitters who had no choice.* In February the government began to employ a part of its stock of gold in the buying of silver for coinage. For this purpose it used its balance of $1\frac{1}{2}$ millions in the Bank of England, and also remitted from India £3,500,000. These were the first silver purchases made since 1893; but by September, when the last of the gold "ear-marked" in the Bank of England had been released, a stock of silver had been bought sufficient to coin eighty-five million rupees, or an amount somewhat in excess of the average annual coinage during the decade before the closure of the mint. In the months which have succeeded, additional purchases of silver have been made, sufficient to bring the total by the end of March, 1901, to 52 million ounces, or the equivalent of 140 million rupees.†

* For an explanation of this action see *East India Financial Statement for 1900-1901*, §§ 32, 33.

† The total of rupees coined on government account during the fiscal year 1900-1901 reached an amount in excess of 130 millions. It has been decided that the profit on coinage due to the difference between the actual cost of the rupee and its issue price in the form of currency shall be set apart as a sort of safety fund, to be used in case of necessity for the maintenance of the rupee exchange. The total profits for the year amounted to £2,900,000, which was remitted to London for investment in consols. *Economist*, April 20, 1901, p. 578.

With these large additions to the silver currency, the proportion of silver in the note reserve has materially improved; and in March, for the first time in fifteen months, the silver holdings were equal to the holdings of gold. On March 31, 1901, the reserves consisted of 112 millions in silver and 86 millions in gold.

Meanwhile various efforts were made to get some of the government's stock of gold into circulation. It was decided that £5,000,000 was a sufficient reserve for all probable contingencies; and, as a tentative measure, the proposal was made to pay out any gold in excess of that amount. Instructions were sent to the more important currency offices to tender gold to all presenters of notes, and only to give rupees when they were preferred. Later the post-offices in the Presidency towns and Rangoon were instructed to give gold in payment of money orders, and the three Presidency banks were requested to issue sovereigns in making payments on government account.* The salaries of many officials thus came to be paid in gold, and government checks came to be cashed in the same metal. These efforts appear as yet to have only met with a very moderate degree of success. The issues of sovereigns were "not inconsiderable,"† and were accepted, at least in the Presidency towns, without much friction or complaint; but a large proportion of them rapidly "returned to government through the currency offices and the Presidency banks." Recipients of sovereigns always had the privilege of exchanging them for rupees at the currency offices, and many appear to have done so. Thus throughout the year 1900, notwithstanding the varied and persistent endeavors of the government to get rid of gold,

* For an account of the measures actually taken to get gold into circulation, see the *Report of the Indian Currency Department* for the year ending March 31, 1900; also, the statement of Mr. Clinton Dawkins, the finance minister, in introducing the Indian budget, in the *East India Financial Statement* for 1900-1901, § 31.

† *Report of the Indian Paper Currency Department* for 1899-1900, § 11, published as a Supplement to the *Gazette of India* for September 1, 1900.

the quantity of that metal in the note reserves was only very gradually reduced. Up to the present (April, 1901), as far as can be calculated, about £3,000,000 in gold has been gotten into so-called circulation; but there appears to be some difference of opinion as to whether much that has been so taken is really doing the work of money. Part, it is said, "has been hoarded, and part used in the arts; and part (a small part) has circulated for a very short time. People find it convenient for railway journeys, and in the large cities it is to some extent used in paying bills; but the people have not yet got used to using gold as money."*

Looking back over the two years 1899 and 1900, it will be seen that during that time the circulation of India absorbed no less than 200 millions of rupees. Approximately, 100 millions of rupees were released from the currency reserve by the substitution of gold, and another 100 million rupees were coined from the newly purchased silver. In other words, the average increase in the rupee circulation during the past two years has considerably exceeded the average increase during the years of free coinage.

The explanations offered for the flow of gold to India,† for its influx in the currency reserve, and for the expansion of the silver currency, are in many respects akin to the explanations given for the rise in the rupee exchange, which we considered earlier in the paper. In fact, it was the continued rise of the exchange and its final mounting

* This is the statement of Mr. A. F. Cox, the head commissioner of the paper currency department, in a letter dated April 15, 1901.

† The net imports of gold into India during the past six years have been as follows:—

1895-96	£1,683,968
1896-97	1,527,358
1897-98	3,272,326
1898-99	4,335,605
1899-1900	6,293,733
1900-1901	561,423

above the prescribed maximum* which induced these movements of the two metals; and, just as opinions differed with regard to the causes of the rise in the rupee to 16*l.*, so they have also varied in interpreting its rise above that level. On the one hand, the situation is ascribed to the growing scarcity of rupees, taken in connection with an increasing demand for them up-country for the relief of the famine and the plague, and an unusual need for them in Burma, because of the exceptionally heavy rice crop. On the other hand, it is attributed to favorable trade balances with gold-using countries, and to the heavy inflow of capital due to the greater confidence felt by European capitalists in the maintenance of the exchange.† The facts at present available do not justify a discrimination between these two sets of influences; but it is probable here, as in the former case, that both have co-operated to produce the actual situation. The rise of the rupee up to and, finally, above 16*l.* has been due, it would appear, to the concurrence of a number of circumstances, of which an important one has been the contraction of the rupee currency relative to the requirements for it. The experience of the Indian rupee has thus in many respects been similar to that of the silver gulden in Holland after the closing of the mints in 1873, to that of the Austrian florin after the suspension of silver coinage in 1878, and to that of the Russian rouble after the closure of the mints to silver in 1893.

The adoption of the gold standard in India was accompanied on many sides by very gloomy predictions,‡ yet

* Consult Table II. and appended diagram.

† See, for example, the budget speech of Mr. Clinton Dawkins, the finance minister, in the *East India Financial Statement for 1900-1901*, § 30.

See also the *Statist* for February, 1900.

‡ Mr. Moreton Frewen, in a letter published in the *New York Herald of August 4, 1899*, declared that "the whole scheme is preposterous, and must break down. . . . This no intelligent student of the currency questions for a moment."

for more than three years the course of the exchanges has realized the most sanguine of expectations. The rate of exchange between rupees and gold has remained unaltered in India, and rupee quotations in England have not varied outside of the shipping points from 16*d*. The question remains, nevertheless, whether this stability is permanent, whether all danger of a reversal of the ratio is past. It has been suggested that the silver coins, which have been flowing to the interior in recent years on account of the famine and the plague and railway building and frontier defence, may some time flow back in such large quantities as to go to a discount,* or that some time there may occur a general failure of the crops, by reason of drought or war, or otherwise, and that this might result in a general lack of exports, and so involve a depreciation of the rupee, on account of the necessity of securing gold to settle the foreign balances.† It is often urged that further legislation is therefore necessary, and it has been claimed by some that the silver rupee will never be thoroughly secure until it is made convertible into gold. Many of the witnesses before the Indian Currency Committee developed plans in this direction. Mr. A. M. Lindsay, Mr. Leonard Darwin, and Mr. H. L. Raphael, all proposed, in one way or another, to make the rupee convertible into drafts on a sterling fund located in London. Lord Farrer, Lord Rothschild, and others even favored the absolute convertibility of the rupee and its direct redemption in gold by the Indian government,—a proposal which was the prototype of the currency bills introduced in the American House of Representatives during the last session of Congress.

Any such scheme, obliging the government to give gold

* This is suggested among others by Sir Robert Giffen in the *Economic Journal* for June, 1900, p. 283.

† See the testimony before the Indian Currency Committee of Mr. Leonard Courtney (Question 13012); Sir J. L. Mackay (Questions 101-104); Mr. A. Arthur (Questions 1876-1883); and Lord Farrer (Question 12203).

for rupees, would evidently involve an immense and very serious financial risk to the government,—a risk of a sort that no other government has ever assumed ; and the Currency Committee of 1898–99 plainly disapproved of the idea. They expressed the opinion that the value of the silver currency could be adequately maintained in India, as elsewhere, by the simpler expedient of limiting its quantity ; and, as regards convertibility, they contented themselves with the vague recommendation that the government hold its gold “freely available for foreign remittances, whenever the exchange falls below specie point, . . . under such conditions as the circumstances of the time may render desirable.” Whether this policy of limited issue and optional convertibility is adequate to insure the rupee against loss, experience alone can show. It is the policy which has been thus far successfully pursued in many other countries,—notably, France, the United States, Germany, and Holland, in each of which large amounts of silver of unlimited tender power are current, but without the government being under any legal obligation to give gold for it on demand. The situation in India to-day, it must be admitted, is somewhat less favorable to the maintenance of the parity than in these other countries, because there is as yet very little gold actually in circulation, and the whole outflow of gold necessary to check a sinking exchange must therefore come from the reserves of the government and of the banks. But, as more and more gold is gotten into the currency, the supply will be greater upon which to rely in case the exchanges should tend to fall ; and the rupee is destined to become increasingly secure. This is unquestionably one of the reasons why the Indian government has been doing everything in its power during the last two years to secure a more general use of gold as money throughout the country. And for the same reason various other arrangements looking to this end, such as the payment of “country” money orders

in gold, the withdrawal of the five rupee and the ten rupee notes, and the requirement that certain taxes be paid partly or wholly in gold, have been proposed.

It was suggested by Mr. E. A. Hambro, in a report subsidiary to that of the committee of 1899,—and has been several times suggested since then by government officials,—that a strong centralized bank would greatly assist in the maintenance of the exchanges. “Working under proper currency regulations, such a bank would be likely to carry them out, . . . in a more effective way, and in a manner more in harmony with the trade wants of the country, than any government department, however well administered.” * If the gold reserves of the country were concentrated in one great national bank, as they are in Germany and France and England, it is claimed that fluctuations in the exchanges and the inflow and outflow of the metal might be controlled to a considerable extent. In abnormal times such an institution could help to steady the rupee value by borrowing in the London money market, which the Presidency banks are at present legally debarred from doing, or by selling exchange on its agents in other countries at lower rates than those dictated simply by considerations of temporary individual profit. It might also counteract tendencies leading to an unfavorable exchange by raising its rate of discount, or it might check the outflow of gold by charging a premium, as in the Bank of France, on bars and foreign coin. Mr. Hambro’s recommendation of a central bank, though approved by the Indian government, which showed a disposition at first to precipitate its adoption, was very coldly received by the three Presidency banks which it was proposed to amalgamate,† and as a consequence is still hanging fire.

The two attributes most commonly predicated of an

* *Report of the Indian Currency Committee*, 1899, p. 22.

† For a discussion of some of the objections to the scheme, see the *Economic Journal* for December, 1900, p. 461, and the *Economist* for 1900, pp. 35, 113, and 1272.

ideal currency are security and elasticity. We have seen in what respects the Indian currency is deficient in the former quality, and have taken a cursory glance at the various plans proposed to remedy the defect. It remains now to consider how far the currency system meets the second test. India has been described as "essentially a country of seasonal trade." Her products are in the main agricultural,—rice, cotton, wheat, opium, jute, seeds, tea, and the like,—and her monetary demands consequently vary with the moving of these crops. She has her busy seasons and her dull seasons, and this means that she stands in peculiar need of a flexible currency. From what has already been said, we are now in a position to see how far the Indian monetary system is responsive to these fluctuations in the demand.

As for the coinage system, it probably presents a greater measure of elasticity than is commonly supposed. The provision under which the government is bound to give rupees for gold at the rate of 16*d.* per rupee leads to an expansion of the currency in any period of prolonged stringency, through the importation of gold. And, although these rupees are not available for foreign export, because of their monopoly value, they will be automatically contracted when excessive so long as the government maintains the policy of giving gold for notes to meet any genuine demand for foreign remittances. The coinage system, therefore, according to present arrangements, can never become permanently contracted or permanently redundant. The adjustment of its quantity to changes in commercial needs will be more direct, and possibly somewhat more rapid, when gold has actually gotten into circulation. With gold current in India, in the event of scarcity supplies of the metal will probably be more readily attracted from abroad, because gold can be made immediately available for currency purposes, and because there will be less question about the possibility of getting it back without loss when

desired. In the event of redundancy, too, gold will flow more freely abroad, both for the latter reason and because its acquisition will not depend alone upon the condition and policy of the government treasury. In other words, as gold is worked into circulation in India, the monetary system will become somewhat more elastic as well as more secure.

At best, however, the expansion and contraction of the currency through the inflow and outflow of coin is a slow, expensive, and very imperfect method of meeting fluctuation in local conditions of trade, especially in the case of a country like India, which is so far removed from the world's financial centres. One turns naturally to the banking system and to the paper currency in looking for the elastic factor which will respond easily to frequent temporary changes in local currency needs.

Banking in India, except in the great commercial centres, seems to have retained a very primitive character, and does not furnish any such substitute for money as the check and deposit system of English and American banks. There is a great amount of *money* lending, but only small use of *credit*, in the stricter sense of the word. It is said that every native of India who possesses money is a money lender, but there are few institutions which create and lend credit and conduct a business that avoids the use of money like that of the banks in Anglo-Saxon communities.* Loans and deposits alike originate in cash transfers, and the deposits are generally on time and seldom subject to withdrawal by check upon demand. Even in the Bank of Bengal, "as a rule, deposits are lodged for six or twelve months." Plainly, under such conditions, "banking," no matter how far extended, offers little real addition to the means of payment in a community, and fails to furnish a flexible mechanism of exchange such as we are accustomed to associate with the banking system.

*See the testimony of Mr. A. M. Lindsay, who has been in the service of the Bank of Bengal for twenty-nine years. Indian Currency Committee, *Minutes of Evidence*, Questions 3611-3617.

Nor are any self-adjusting elements contributed by the paper currency of India. The notes have always been unpopular with the natives. They do not circulate at all outside of the Presidency towns and other large trade centres,* and they are consequently quite unavailable to meet the trade demands of the interior for the moving of the crops. The question as to how the notes may be rendered more popular is one of those most actively discussed to-day by Indian officials. It has been suggested that they would be more willingly accepted if the government were to undertake to encash them at any of its two hundred and sixty odd treasuries, the assumption being that, the more readily such a currency will be taken back, the more easily it can be gotten out. The proposal, however, to cash notes at any bureau over an area as great as that of India involves one obviously serious difficulty,—that of foreseeing at two hundred and sixty widely scattered places just what the demands will be and at just which bureaus they will arise. It seems scarcely probable that the government will see fit to assume such a burdensome obligation. But, even were the difficulty surmounted and paper money were to become universally acceptable, the rigidity of the currency system would be but little affected, unless some still more radical change were made in the conditions of issue. At present the paper issues are inflexibly restricted in amount. Since 1861 the banks have not had the right to issue notes, and the notes of the government can only be increased as coin is withdrawn from circulation. The only exception to this statement is furnished by the provisions of the Gold Note Act of 1898, which allow the issue of notes, not only against gold withdrawn from circulation, but also against deposits of gold in London. Such issues, however, are not made upon fixed terms, and so are virtually at the option of the government, which may raise the price

* Indian Currency Committee, Questions 4163, 12638.

of issue at any time to such a point as to be practically prohibitive. Several writers have suggested that this method of issue would be more effective if the terms were definite and invariable. It has been repeatedly proposed, too, that the provisions of the act should be extended to the leading Australian cities, so that an exchange bank could deposit gold in Melbourne or Sydney or Perth as well as in London, and receive therefor rupee notes in India.

The situation is rendered more difficult by the fact that the Indian government maintains a separate treasury system which quite frequently, as in the United States, withdraws considerable sums from circulation, and locks them up at the very time when the country's need for currency is most acute.* Taxes grow more productive and the treasury surplus inevitably tends to expand when business is active; and both tend to contract when trade is dull, which means that the expansions and contractions in the volume of the treasury's inactive reserves are directly contrary to the changes in the needs of trade. In the spring, which is the busy season and the time when the country's currency demand is greater, the government is likely to hold larger balances than in the monsoon, which is the dull season, although it ought to follow exactly the opposite programme. It is true that the officials do what they can to relieve any stringency for which the system is responsible, and endeavor to place the government balances at the disposal of the public. During the busy season the Indian Council always enlarges its offers of bills and telegraphic transfers; and the market, therefore, if willing to pay the price demanded, can avail itself of the

* For an account of the way in which the government funds are distributed between its reserve treasuries in Calcutta, Madras, and Bombay, and the two hundred and sixty other government treasuries, on the one hand, and the Presidency banks, with their branches, on the other, and for an explanation of the reasons for the establishment of the independent treasury system in India, consult the evidence taken before the Indian Currency Committee, Questions 5663-5673, 5478-5481, and the *Economic Journal* for December, 1900, p. 462.

greater part of the surplus. The balances are made available to the public also as a means of transferring money from one part of India to another.* The government, having resources distributed among more than two hundred and sixty different treasury bureaus in all parts of the country, is in a position to render great assistance in the making of remittances. By substituting a reserve in the one place for a reserve in the other, it can effect transfers from Presidency to Presidency and from district to district; and it does this for banks and the public at large so far as it conveniently can.† Notwithstanding, however, all of these arrangements to utilize the balances, the money accumulated by the government cannot be as serviceable for currency purposes as it would be if left in circulation or in the banks; and it must be evident that the rigidity of the Indian currency is aggravated to a considerable extent on account of this separate treasury system.

The most pressing problem, then, which those in charge of the Indian currency have before them to-day is how to render the system more flexible and more responsive to changing commercial needs. Whether the practical difficulties in the way of a great central bank can be overcome

* "The place where the cash or currency note reserve shall be stored is not declared by statute; and, in consequence, much of the remittance business of the government and commerce is affected by the manipulation of this reserve. Thus suppose government has in its treasury balances at A a lakh of rupees which it wants at Calcutta, the treasurer at A locks it up and credits a lakh to the currency reserve, and the currency department at Calcutta pays over a lakh to the Calcutta treasury. So, again, if A wants its lakh back, any treasury which has a lakh to spare transfers it in its books from treasury to currency, and A releases its own lakh for its own use by crediting treasury and debiting currency. These operations are often on a large scale." *Economic Journal*, December 1, 1900, p. 464.

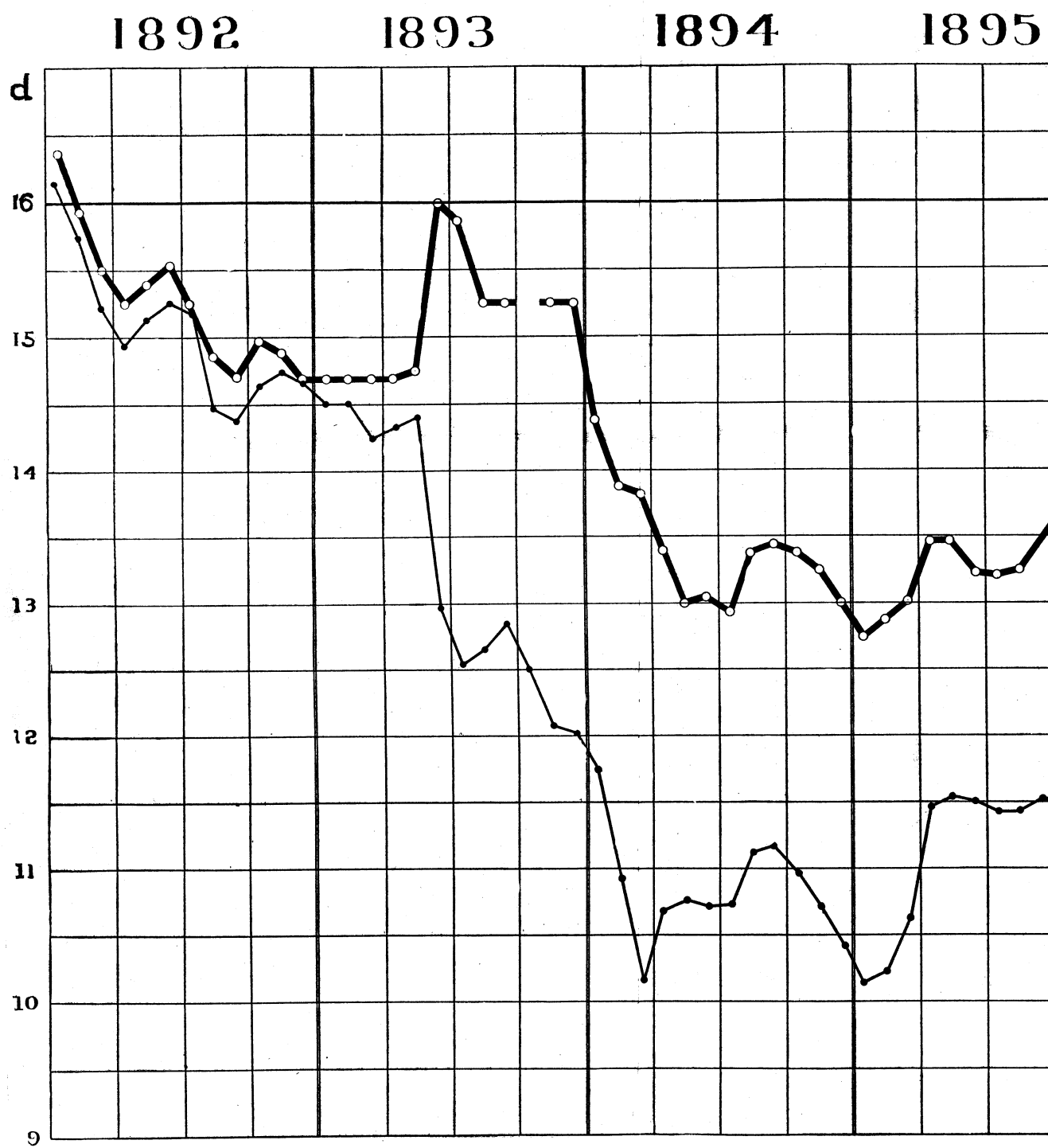
† "Trade demands for coin arise at different times in the year at different Provinces. Thus from December to March Burma wants about Rs 80,000,000 to finance the rice crop of that country, and coin has to be moved there for that purpose. About April a demand arises in the Punjab and the North-west Provinces of India, and coin has to be sent there. The cost of moving the coin is recovered at present from traders by charging a premium on bills payable at the busy trade centres." Letter of Mr. A. F. Cox, head commissioner of the paper currency.

—and a partial solution of the problem may be found in the establishment of a Bank of India which will take charge of the government balances, and will manage the paper currency under less rigorous restrictions—or whether relief will be found in some provision which will allow the government itself a larger freedom in its note issue, it is impossible at present writing to predict. In any case, the difficulties will never be wholly resolved until banking habits have further developed, and the notes have obtained a wider acceptance.

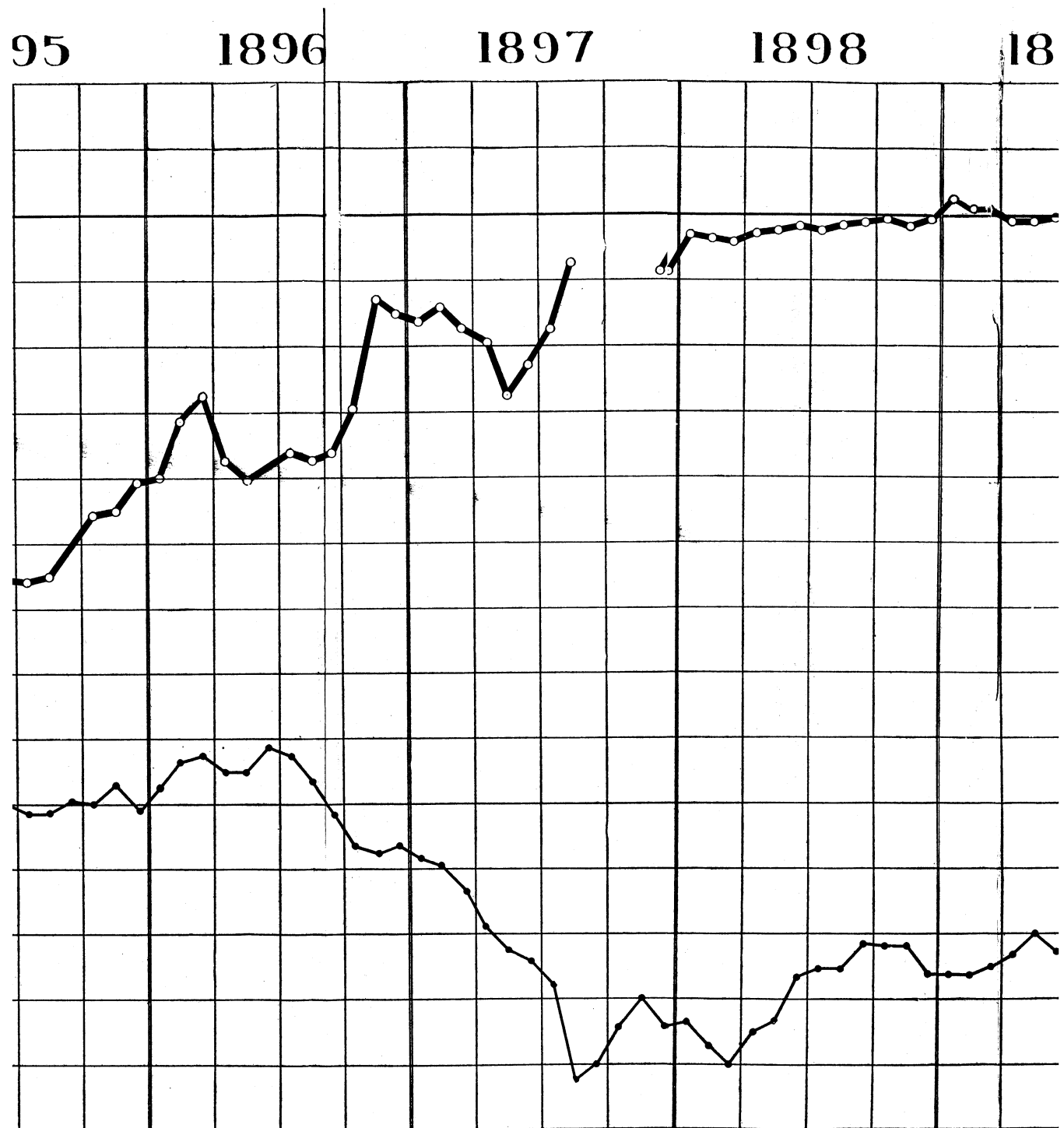
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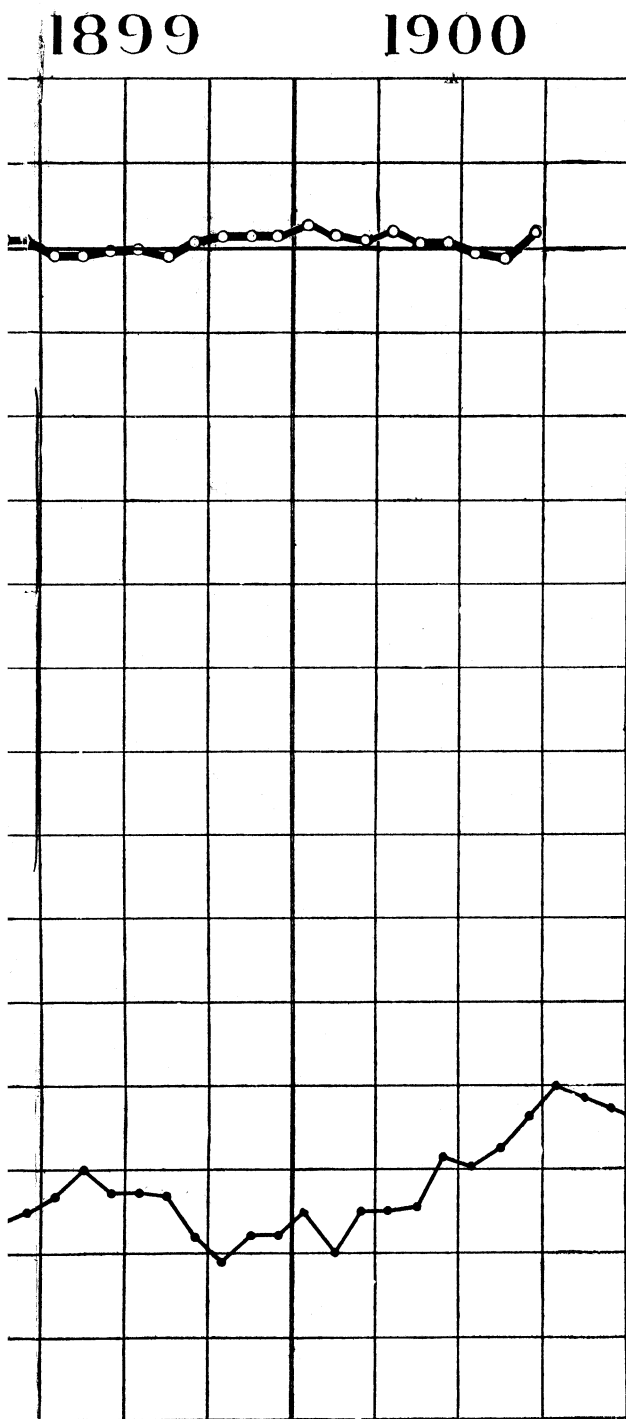
HARVARD UNIVERSITY.

THE METALLIC AND



AND EXCHANGE VALUE OF THE RUPEE IN PENCE.





ated from the London price of silver.

APPENDIX.

TABLE I.

VALUE IN PENCE OF THE RUPEE AND OF THE SILVER CONTAINED IN
THE RUPEE.

The following table shows (1) the annual average price in pence of the rupee as shown by the rate for bills and telegraphic transfers on India and (2) the average metallic value of the rupee calculated from the price of silver in the London market.

The price of India bills is averaged for the fiscal year beginning April 1, the price of silver for the calendar year.

	Exchange value of rupee.	Metallic value of rupee.		Exchange value of rupee.	Metallic value of rupee.
	<i>d.</i>	<i>d.</i>		<i>d.</i>	<i>d.</i>
1850 . . .	24.3	22.7	1876 . . .	20.5	19.6
1851 . . .	24.1	22.7	1877 . . .	20.8	20.4
1852 . . .	23.9	22.5	1878 . . .	19.8	19.5
1853 . . .	24.1	22.8	1879 . . .	20.0	19.0
1854 . . .	23.1	22.8	1880 . . .	19.9	19.4
1855 . . .	24.2	22.8	1881 . . .	19.9	19.2
1856 . . .	24.2	22.8	1882 . . .	19.5	19.3
1857 . . .	24.6	22.9	1883 . . .	19.5	18.7
1858 . . .	25.7	22.8	1884 . . .	19.3	18.8
1859 . . .	26.0	23.0	1885 . . .	18.2	18.0
1860 . . .	26.0	22.9	1886 . . .	17.4	16.8
1861 . . .	23.9	22.6	1887 . . .	16.9	16.6
1862 . . .	23.9	22.8	1888 . . .	16.4	15.9
1863 . . .	23.9	22.8	1889 . . .	16.5	15.8
1864 . . .	23.9	22.8	1890 . . .	18.0	17.7
1865 . . .	23.8	22.7	1891 . . .	16.7	16.7
1866 . . .	23.1	22.7	1892 . . .	15.0	14.8
1867 . . .	23.2	22.5	1893 . . .	14.5	13.2
1868 . . .	23.2	22.5	1894 . . .	13.1	10.7
1869 . . .	23.3	22.5	1895 . . .	13.6	11.1
1870 . . .	22.5	22.5	1896 . . .	14.4	11.5
1871 . . .	23.1	22.5	1897 . . .	15.3	10.2
1872 . . .	22.7	22.4	1898 . . .	16.0	10.0
1873 . . .	22.3	22.0	1899 . . .	16.0	10.2
1874 . . .	22.1	21.6	1900 . . .	16.0	10.4
1875 . . .	21.6	21.1			

TABLE II.
INDIAN PAPER CURRENCY.

This table shows the amount of the note circulation and the composition of the reserve on the last day of each month, and the average monthly rate for telegraphic transfers on India during recent years (in millions of rupees).

	RESERVE HELD AGAINST THE NOTE CIRCULATION.				Gross circula- tion.	Average monthly rate for telegraphic transfers.
	Silver.	Gold.	Gold in London.	Gov't. secu- rities.		
March, 1896 . .	179	Nil	Nil	80	259	14.38
March, 1897 . .	137	"	"	100	237	15.03
March, 1898 . .	145	2	"	100	247	15.78
December, 1898 .	148	3	"	100	252	16.00
1899						
January . .	152	5	Nil	100	257	16.12
February . .	146	17	"	100	262	16.06
March . .	151	30	"	100	282	16.02
April . .	146	34	"	100	280	16.00
May . .	148	34	"	100	282	15.96
June . .	156	35	"	100	291	15.97
July . .	157	35	"	100	293	15.98
August . .	149	38	"	100	288	15.97
September .	137	39	"	100	276	16.05
October . .	123	52	1.5	100	277	16.12
November .	101	61	11.2	100	273	16.11
December . .	83	68	11.2	100	263	16.07
1900						
January . .	68	81	22.5	100	272	16.17
February . .	49	101	22.5	100	273	16.09
March . .	52	112	22.5	100	287	16.02
April . .	37	119	22.5	100	279	16.03
May . .	47	124	15.	100	286	16.03
June . .	69	127	7.5	100	304	16.03
July . .	70	130	7.5	100	308	16.00
August . .	58	126	Nil	100	284	15.97
September .	53	130	"	100	283	16.03
October . .	64	119	"	100	283	None sold
November .	69	114	"	100	283	" "
December . .	67	109	4.5	100	281	16.12
1901						
January . .	76	117	Nil	100	294	16.09
February . .	76	105	"	100	281	16.03
March . .	112	86	"	100	298	15.97